

**NEW SOURCE CONSTRUCTION PERMIT
and MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY**

**Noble Composites, Inc.
2424 East Kercher Road
Goshen, Indiana 46526**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1 if new source, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 039-14254-00556	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: August 9, 2001

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary fiberglass and wood reinforced plastic flat panel manufacturing plant.

Authorized Individual: Larry Farver, President
Source Address: 2424 East Kercher Road, Goshen, Indiana 46526
Mailing Address: 66231 County Road 21, Goshen, Indiana 46526
Phone Number: (219)533-1032
SIC Code: 3089
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD or Emission Offset Rules;
Major Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) Two (2) gel coat tunnels, identified as EU 1 and EU 2, to be constructed in 2001, each with a maximum of 4.5 molds per hour, both equipped with dry filters for particulate control and exhausting to stack EFG 1;
- (b) One (1) laminating tunnel, identified as EU 3, to be constructed in 2001, with a maximum of 4.5 molds per hour, equipped with dry filters for particulate control and exhausting to stack EFL 2;
- (c) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations;
- (d) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone;
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
 - (1) Various building heaters;
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air-filtration equipment;
- (g) Paved and unpaved roads and parking lots with public access; and

- (h) Sources emitting greater than one (1) pound per day but less than twelve and a half (12.5) pounds per day or two and a half (2.5) tons per year of any combination of HAPs:
 - (1) Two (2) six thousand (6000) gallon bulk tanks for storing liquid polyester resin.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).

- (e) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, and 326 IAC 2-7 (Part 70 Permit Program) this source is a major source.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Source Modification [326 IAC 2-7-10.5]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-10.5 whenever the Permittee seeks to construct new emissions units, modify existing emissions units, or otherwise modify the source.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

C.5 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.7 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.8 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.9 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements

C.10 Performance Testing [326 IAC 3-6]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
- (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously

submitted a request for an administrative amendment to the permit, and such request has not been denied or;

- (3) An automatic measurement was taken when the process was not operating; or
- (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

Record Keeping and Reporting Requirements

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality(OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.16 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.17 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;

- (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.19 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

- (a) Two (2) gel coat tunnels, identified as EU 1 and EU 2, to be constructed in 2001, each with a maximum of 4.5 molds per hour, both equipped with dry filters for particulate control and exhausting to stack EFG 1;
- (b) One (1) laminating tunnel, identified as EU 3, to be constructed in 2001, with a maximum of 4.5 molds per hour, equipped with dry filters for particulate control and exhausting to stack EFL 2;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 New Source Toxics Control [326 IAC 2-4.1-1] and VOC [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the new fiberglass panel manufacturing operation is subject to the requirements of 326 IAC 8-1-6 because the potential emissions are greater than twenty-five (25) tons per year and there are no other applicable Article 8 rules that apply. This rule requires that the Best Available Control Technology (BACT) be used to control VOC emissions. BACT for this new source shall be satisfied by the MACT determination of 326 IAC 2-4.1 (New Source Toxics Control).

Pursuant to the MACT determination under 326 IAC 2-4.1-1, operating conditions for the new fiberglass panel manufacturing operation shall be the following:

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit volatile organic HAP from use of such resins and gel coats only shall be less than one hundred (100) tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:
 - (1) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
 - (2) The emission factors approved for use by IDEM, OAQ shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purpose of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emission mass basis:

Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production ¹ Gel Coat	37

Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Tooling Gel Coat	45
Production Resin	35
Tooling Resin	43

¹ Production refers to the manufacture of parts

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in the table in this subsection or additional emission reduction techniques approved by IDEM, OAQ may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions for higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat) < (Emissions from compliant resin or gel coat) - Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) * EF
(HAP monomer emission factor for resin or gel coat used, %);

EF, HAP monomer emission factor = emission factor expressed as pounds (lb) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

- (c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAQ.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via the use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, controlled spray used in combination with automated actuators, or installing a control device.

- (d) Optimized spray techniques according to a manner approved by IDEM, OAQ shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:
 - (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
 - (2) For VOC- and/or HAP-containing materials:
 - (A) Cleanup solvent containers shall be used to transport solvent from drums to work.
 - (B) Cleanup stations shall be closed containers having soft-gasketed, spring-loaded closures and shall be kept completely closed when not in use.
 - (C) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
 - (D) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
 - (E) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
 - (3) All material storage containers shall be kept covered when not in use.
- (f) An operator training program shall be implemented as follows:
 - (1) All new personnel shall be trained within thirty (30) days of commencement of operation.
 - (2) All personnel shall be given a refresher training annually.
 - (3) The training shall include, at a minimum, all of the following topics:
 - (A) Appropriate application techniques.
 - (B) Appropriate equipment cleaning procedure.
 - (C) Appropriate equipment setup and adjustment to minimize material usage and overspray.
 - (4) The following training records shall be maintained on site and available for inspection and review:
 - (A) A copy of the current training program.
 - (B) A list of current personnel, by name, that are required to be trained, the dates they were trained, and the date of the most recent refresher training.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2, the PM from the fiberglass panel manufacturing operation shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.5 Volatile Organic Compounds (VOC)

Compliance with the monomer content and usage limitations contained in Conditions D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.6 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the fiberglass panel manufacturing units are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.7 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the fiberglass panel manufacturing stacks while one or more of the tunnels are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.8 Visible Emissions Notations

- (a) Daily visible emission notations of the fiberglass facilities' stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the volatile organic HAP usage limits and/or the volatile organic HAP emission limits established in Condition D.1.1.
 - (1) The usage by weight and monomer content of each resin and gel coat. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;
 - (2) A log of the dates of use;
 - (3) Method of application and other emission reduction techniques for each resin and gel coat used;
 - (4) The calculated total volatile organic HAP emissions from resin and gel coat use for each month.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the daily visible emission notations of the fiberglass operation's stack exhaust.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

- (c) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations;
- (d) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the trimmers and grinding and machining operations shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The particulate matter control devices shall be in operation at all times that the trimmers, grinding, and machining equipment are operating in order to comply with this limit.

SECTION D.3

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

- (e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
 - (1) Various building heaters;
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air-filtration equipment;
- (g) Paved and unpaved roads and parking lots with public access; and
- (h) Sources emitting greater than one (1) pound per day but less than twelve and a half (12.5) pounds per day or two and a half (2.5) tons per year of any combination of HAPs:
 - (1) Two (2) six thousand (6000) gallon bulk tanks for storing liquid polyester resin.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

There are no specific regulations applicable to these units.

MALFUNCTION REPORT
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?____, 25 TONS/YEAR SULFUR DIOXIDE ?____, 25 TONS/YEAR NITROGEN OXIDES?____, 25 TONS/YEAR VOC ?____, 25 TONS/YEAR HYDROGEN SULFIDE ?____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?____, 25 TONS/YEAR FLUORIDES ?____, 100TONS/YEAR CARBON MONOXIDE ?____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

MSOP Quarterly Report

Source Name: Noble Composites, Inc.
Source Address: 2424 East Kercher Road, Goshen, Indiana 48526
Mailing Address:
MSOP No.: M039-14254-00556
Facility: Fiberglass panel manufacturing units
Parameter: VOC/HAP
Limit: 100 tons per twelve (12) consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name: Noble Composites, Inc.
Source Location: 2424 East Kercher Road, Goshen, Indiana 46526
County: Elkhart
SIC Code: 3089
Operation Permit No.: 039-14254-00556
Permit Reviewer: ERG/KC

The Office of Air Quality (OAQ) has reviewed an application from Noble Composites, Inc. relating to the construction and operation of a plant to manufacture fiberglass and wood reinforced plastic flat panels.

Permitted Emission Units and Pollution Control Equipment

There are no permitted emission units and pollution control equipment operating at this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

The source is approved to construct and operate the following emission units and pollution control devices:

- (a) Two (2) gel coat tunnels, identified as EU 1 and EU 2, to be constructed in 2001, each with a maximum of 4.5 molds per hour, both equipped with dry filters for particulate control and exhausting to stack EFG 1;
- (b) One (1) laminating tunnel, identified as EU 3, to be constructed in 2001, with a maximum of 4.5 molds per hour, equipped with dry filters for particulate control and exhausting to stack EFL 2;
- (c) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations;

- (d) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone;
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
 - (1) Various building heaters;
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air-filtration equipment;
- (g) Paved and unpaved roads and parking lots with public access; and
- (h) Sources emitting greater than one (1) pound per day but less than twelve and a half (12.5) pounds per day or two and a half (2.5) tons per year of any combination of HAPs:
 - (1) Two (2) six thousand (6000) gallon bulk tanks for storing liquid polyester resin.

Existing Approvals

There are no previous approvals for this

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
EFG 1	Gel coat tunnels	30	2.5	20,000	Ambient
EFL 2	Laminating tunnels	30	2.5	20,000	Ambient

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on April 5, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Page 1 through 4).

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	175.68
PM-10	175.68
SO ₂	0
VOC	229.37
CO	0
NO _x	0

HAP's	Potential To Emit (tons/year)
Styrene	153.81
Methyl Methacrylate	39.81
Methyl Ethyl Ketone	4.43
Toluene	4.55
TOTAL	202.6

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is greater than twenty-five (25) tons per year, therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Maintenance Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance attainment. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for PM₁₀, SO₂, NO₂, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source

Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	17.71
PM10	17.71
SO ₂	0
VOC	229.37
CO	0
NO _x	0
Styrene	153.81
Methyl Methacrylate	39.81
Methyl Ethyl Ketone	4.43
Toluene	4.55
Combination HAPs	202.6

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) at least one of the criteria pollutant is greater than or equal to 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is greater than or equal to 10 tons per year, or
- (c) any combination of HAPs is greater than or equal to 25 tons/year.

This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. 40 CFR Part 60, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984) does not apply to this facility since the tanks are less than 40 cubic meters in volume.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of a plant to manufacture fiberglass and wood reinforced plastic flat panels of will emit greater than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 will apply.

Pursuant to the MACT determination under 326 IAC 2-4.1-1, operating conditions for the new fiberglass panel manufacturing operation shall be the following:

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit volatile organic HAP from use of such resins and gel coats only shall be less than one hundred (100) tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:
 - (1) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
 - (2) The emission factors approved for use by IDEM, OAQ shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purpose of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.

- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emission mass basis:

Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production ¹ Gel Coat	37
Tooling Gel Coat	45
Production Resin	35
Tooling Resin	43

¹ Production refers to the manufacture of parts

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in the table in this subsection or additional emission reduction techniques approved by IDEM, OAQ may be used to offset the use of gel coats and resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions for higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat) \leq (Emissions from compliant resin or gel coat) - Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) * EF
(HAP monomer emission factor for resin or gel coat used, %);

EF, HAP monomer emission factor = emission factor expressed as pounds (lb) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

- (c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAQ.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via the use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, controlled spray used in combination with automated actuators or installing a control device.

- (d) Optimized spray techniques according to a manner approved by IDEM, OAQ shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:
 - (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
 - (2) For VOC- and/or HAP-containing materials:
 - (A) Cleanup solvent containers shall be used to transport solvent from drums to work.
 - (B) Cleanup stations shall be closed containers having soft-gasketed, spring-loaded closures and shall be kept completely closed when not in use.
 - (C) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
 - (D) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
 - (E) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
 - (3) All material storage containers shall be kept covered when not in use.
- (f) An operator training program shall be implemented as follows:
 - (1) All new personnel shall be trained within fifteen (15) days of hiring and all existing personnel shall be trained or evaluated by a supervisor within thirty (30) days of the effective date of this rule.
 - (2) All personnel shall be given a refresher training annually.
 - (3) The training shall include, at a minimum, all of the following topics:
 - (A) Appropriate application techniques.
 - (B) Appropriate equipment cleaning procedure.
 - (C) Appropriate equipment setup and adjustment to minimize material usage and overspray.
 - (4) The following training records shall be maintained on site and available for inspection and review:
 - (A) A copy of the current training program.
 - (B) A list of current personnel, by name, that are required to be trained, the dates they were trained, and the date of the most recent refresher training.

326 IAC 8-1-6 (New Facilities - General Reduction Requirement)

The fiberglass panel manufacturing operation is subject to the requirements of 326 IAC 8-1-6 because the potential emissions are greater than twenty-five (25) tons per year and there are no other applicable Article 8 rules that apply. It is determined that the BACT requirements under 326 IAC 8-1-6 shall be satisfied by meeting the MACT standards under the New Source Toxics Control Rule (326 IAC 2-4.1-1).

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the fiberglass panel manufacturing operation shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the fiberglass panel manufacturing equipment is in operation, in order to comply with this limit.

Conclusion

The construction and operation of this fiberglass and wood reinforced plastic flat panels manufacturing plant shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit 039-142544-00556

VOC and Particulate

Resin/Gelcoat Usage

Company Name: Noble Composites, Inc.
 Address City IN Zip: 2424 East Kercher Road, Goshen, Indiana 46526
 Permit Number: 039-14254-00556
 Plt ID: 039-00556
 Reviewer: ERG/KC
 Date: 05/02/01

Material	Density (Lb/Gal)	Weight % Monomer	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Emission Factor (%)	Transfer Efficiency (%)	Pounds of VOC Per Hour	Pounds of VOC per Day	Tons of VOC per Year	Tons of PM per Year
101-62345UL Gelcoat (EU 1)	10.1	29.40%	2.50000	4.500	9.6%	75.00%	10.86	260.56	47.55	87.84
101-62345UL Gelcoat (EU 2)	10.1	29.40%	2.50000	4.500	9.6%	75.00%	10.86	260.56	47.55	87.84
COR61-AA-830 Resin (EU3)	10.9	33.50%	9.15000	4.500	3.0%	100.00%	13.40	321.66	58.70	0.00

State Potential Emissions

Add worst case coating to all solvents

35.12

842.79

153.81

175.68

METHODOLOGY

Note: Emission Factors taken from the CFA Styrene Emissions Determination Model for Open Molding Operations

Potential VOC Pounds per Hour = Maximum (unit/hr) * Density (lb/gal) * Gal of Mat. (gal/unit) * Emission Factor (%)

Potential VOC Pounds per Day = Pounds per Hour (lb/hr) * 24 (hr/day)

Potential VOC Tons per Year = Pounds per Hour (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Particulate Potential Tons per Year = (unit/hr) * (lb/gal) * (gal/unit) * (1- Weight % Monomer) * (1- Transfer Efficiency) * 8760 (hr/yr) / 2000 (lb/ton)

VOC and Particulate

Accessory Solvent Usage

Company Name: Noble Composites, Inc.
 Address City IN Zip: 2424 East Kercher Road, Goshen, Indiana 46526
 Permit Number: 039-14254-00556
 Plt ID: 039-00556
 Reviewer: ERG/KC
 Date: 05/02/01

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Cadox M-50a Red Catalyst	8.4	100.00%	5.0%	95.0%	0.0%	0.00%	0.35928	4.500	7.93	7.93	12.82	307.80	56.17
TR-905 Mold Prep Cleaner	7.1	100.00%	0.0%	100.0%	0.0%	0.00%	0.04681	4.500	7.05	7.05	1.49	35.64	6.50
TR-910 Sealer	7.3	99.00%	0.0%	99.0%	0.0%	0.00%	0.04521	4.500	7.23	7.23	1.47	35.29	6.44
TR-900 Mold Release	6.8	99.00%	0.0%	99.0%	0.0%	0.00%	0.04853	4.500	6.73	6.73	1.47	35.28	6.44

State Potential Emissions

Add worst case coating to all solvents

17.25 414.01 75.56

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

surcoat.wk4 9/95

HAP Calculations

Resin/Gelcoat Usage

EU1, EU 2, EU 3

Company Name: Noble Composites, Inc.
 Address City IN Zip: 2424 East Kercher Road, Goshen, Indiana 46526
 Permit Number: 039-14254-00556
 Plt ID: 039-00556
 Reviewer: ERG/KC
 Date: 05/02/01

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Styrene	Weight % Methyl Methacrylate	Styrene Emissions (ton/yr)	Methyl Methacrylate Emissions (ton/yr)	Emission Factor (%)
101-62345UL Gelcoat (EU 1)	10.1	2.50000	4.500	25.40%	4.00%	47.55	19.91	9.6%
101-62345UL Gelcoat (EU 2)	10.1	2.50000	4.500	25.40%	4.00%	47.55	19.91	9.6%
COR61-AA-830 Resin (EU3)	10.9	9.15000	4.500	33.50%	0.00%	58.70	0.00	3.0%

Total State Potential Emissions

153.81

39.81

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

HAP Calculations

Accessory Solvent Usage

EU1, EU 2, EU 3

Company Name: Noble Composites, Inc.
 Address City IN Zip: 2424 East Kercher Road, Goshen, Indiana 46526
 Permit Number: 039-14254-00556
 Plt ID: 039-00556
 Reviewer: ERG/KC
 Date: 05/02/01

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % MEK	Weight % Toluene	MEK Emissions (ton/yr)	Toluene Emissions (ton/yr)
Cadox M-50a Red Catalyst	8.4	0.35928	4.500	2.00%	0.00%	1.18	0.00
TR-905 Mold Prep Cleaner	7.1	0.04681	4.500	50.00%	70.00%	3.25	4.55
TR-910 Sealer	7.3	0.04521	4.500	0.00%	0.00%	0.00	0.00
TR-900 Mold Release	6.8	0.04853	4.500	0.00%	0.00%	0.00	0.00

Total State Potential Emissions

4.43

4.55

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs